

REMARKS

Claims 15-27 are pending in this application. By this Amendment, claims 15, 20, 21 and 25 are amended. Reconsideration of the application based upon the above amendments, the attached request for Continued Examination and the following remarks is respectfully requested.

The courtesies extended to Applicant's representative by Examiner Menon at the interview held June 25, 2007, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicant's record of the interview.

The Office Action rejects claim 21 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Claim 21 has been amended to obviate the rejection. Accordingly, reconsideration and withdrawal of the rejection of claim 21 under 35 U.S.C. §112, first paragraph, is respectfully requested.

The Office Action rejects claims 15-18 and 22-24 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,843,542 to Brushafer et al. (hereinafter "Brushafer"). Claims 15-17, 22, 23, 25 and 26 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,180,409 to Fischer. Additionally, claims 24 and 27 are rejected under 35 U.S.C. §102(b) as being anticipated, or in the alternative, under 35 U.S.C. §103(a) as obvious over Fischer. Claims 15-18 and 20-27 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,076,627 to Friedrichs. Applicant respectfully traverses these rejections.

The Office Action, on page 7, states that claim 19 is objected to as being dependent upon a rejected base claim. Specifically, claim 19 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims. Applicant appreciates this indication of allowability.

The Office Action asserts that Brushafer teaches the features as positively recited in at least independent claims 15 and 22. However, Brushafer teaches a woven fabric sleeve to provide a protective or insulating covering over an elongated item, such as piping, wiring and other tubular shaped items, and not a filter bag, as positively recited in the pending claims. See column 1, lines 12-21 and column 3, lines 27-30. Nowhere does Brushafer disclose any type of filtering bag.

Additionally, Brushafer is completely silent as to any filtering purpose, which is logical since the protective fabric presented therein is not suitable for filtering. The fabric of Brushafer uses alternating filamentary members to create empty spaces that function to result in increased flexibility of the fabric. Brushafer fails to disclose a filtering portion having a structure and density for separating liquid from a mixture consisting of solids and liquid. Thus, nowhere does Brushafer disclose a disc filter, a bag for a disc filter, a bag filter, or a filtering module for a drum filter as in the present claims.

The Patent Office alleges that the coating of Brushafer is the same as the batt layer recited in claim 6 (new claim 19 that depends from claim 15), citing column 6, lines 22-35 of Brushafer. However, the coating in Brushafer is an epoxy material that is formed with a sleeve shape and heated to cure the epoxy. As such, the coating of Brushafer is only present on the surface of the fabric. On the other hand, the batt layer of claim 19 provides a solid-liquid separation fabric, which is attached to the fabric by needling. Needling provides for batt fibers not only present on the surface of the fabric, but also penetrated inside the fabric.

Therefore, the structure of the disc filter bag, disc filter, filtering module or drum filter as recited in the present claims 15-27 is different from the structure of the fabric sleeve as taught by Brushafer. The assertion by the Office Action, on page 6 of the Office Action, that Brushafer is capable of being used as a filter is incorrect. To make this assumption, one must assume, beyond any teaching of Brushafer, that the material used in the construction of the

protective cloth of Brushafer is suitable for immersion in a solid-liquid mixture. Brushafer teaches using filamentary members for constructing the protective material, and in no manner teaches that the members can be used in a solid-liquid environment. The use of filamentary fibers with the sole purpose of protecting and covering elongated structures (Abstract) is entirely distinct from the features as recited in the pending claims. Reconsideration and withdrawal of the rejection is respectfully requested.

The Office Action asserts that Fischer teaches the features as positively recited in at least pending independent claims 15, 22 and 25. Fischer teaches a fabric for filtering particulate matter from a stream of hot gases, such as gases from exhausts of combustion engines (Abstract). Fischer teaches a fabric that can trap large quantities of soot as mentioned in column 2, lines 16-17. As shown in Figure 1 of Fischer, small pockets are left between full yarns (16) that extend between support strands of each layer of the fabric (12). Figure 2 shows two tiny cells (18) between the fill and support yarns. Such pockets and cells can serve as traps for filtered particulate matter as mentioned in column 4, lines 45-51. As such, the fabric traps particles and is not capable of solid-liquid separation. The specific teachings of Fischer teach away from the subject matter as recited in the pending claims, because one skilled in the art would not attempt to combine soot from exhaust gases with any type of liquid thus causing severe clogging of any type of filter membrane. Thus, the fabric of Fischer is unsuitable for solid-liquid separation.

Moreover, Fischer mentions that gases pass radially inward through the layers of filtering fabric and perforations of the inner tube (see column 5, lines 7-9). In Figure 3 of Fischer, arrows (38) show the direction of the flow as transverse relative to the direction of the surface. As such, a filtered fluid would not flow between the filtering fabric and the tube of Fischer. Thus, Fischer fails to disclose a structure for separating liquid from a mixture consisting of solids and liquid.

Therefore, nowhere does Fischer disclose a disc filter, a bag for a disc filter or drum filter or a filtering module for a drum filter as in the present claims. Reconsideration and withdrawal of the rejection is respectfully requested. Reconsideration and withdrawal of the rejection is respectfully requested.

The Office Action asserts that Friedrichs the features as positively recited in independent claims 15, 20 and 25. Specifically, the Office Action asserts that Friedrichs teaches "an underside of the filter bag, which is a portion facing the filtering segment, comprises substantially parallel yarns that are thicker than the rest of the yarns of the bag," as positively recited in the pending claims. This assertion is incorrect.

Friedrichs teaches that a symmetrical fabric where the thicker yarns are not placed on the under side, but, instead, traverse yarns are run above and under the thicker yarns using exactly the same weaving pattern (Fig. 1). Additionally, Friedrichs teaches placing the thicker yarns (1) as close as possible to minimize the space between the yarns (3), as illustrated by Fig. 1. As such, Friedrichs cannot reasonably be considered to teach "the thicker yarns are placed at predetermined intervals defined by the other yarns of the filter cloth extending parallel thereto to provide desired parallel channels therebetween to enable the filtered liquid to flow in the direction of the surface of the filtering segment between the filtering portion of the filter bag and the filtering segment," as positively recited in the pending claims.

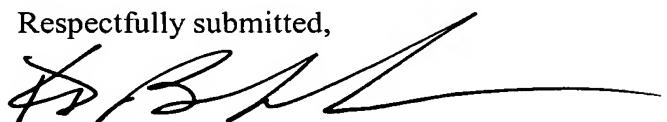
For at least the above reasons, the applied references cannot reasonably be considered to teach, or to have suggested, the combinations of all of the features recited in at least independent claims 15, 20, 22 and 25. Further, 16-18, 21, 23 and 24 would also not have been suggested by the applied prior art references for at least the respective dependence of these claims on allowable independent claims 15, 20, 22 and 25, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejections of claims 15-18 and 20-27 under 35 U.S.C. §102(b) and §103(a) as being unpatentable over the combination of applied prior art references are respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 15-18 and 20-27, in addition to the continued allowability of claim 19, are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Request for Continued Examination

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